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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Max Fudim

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EXAMINER

CHURNET, DARGAYE H

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/647,212	Applicant(s) FUDIM ET AL.	
	Examiner Dargaye H. Churnet	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/12/05 and 4/5/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Objections

1. Claims 6, 8, 12, 23, and 25 are objected to under 37 C.F.R 1.75 because of the following formalities:

In claim 6, line 2, the occurrence of "a power saving mode" seems to refer back to "a power saving mode" previously recited in claim 5. If this is true, it is suggested to change "a power saving mode" to ---the power saving mode---. Claims 12 and 23 are objected to for similar reasons.

In claim 8, lines 2-3, the occurrence of "first and second, respective, access points" seems to refer back to "first and second, respective, access points" previously recited. If this is true, it is suggested to change "first and second, respective, access points" to ---the first and second, respective, access points---. Claim 25 is objected to for similar reasons.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2-3, the phrase "roaming from a first access point to a second access point by presenting a power saving mode" is unclear because "presenting a power saving mode" does not cause roaming to occur. Claims 11 and 28 are rejected for similar reasons.

In claim 5, lines 2-3, the phrase "a supplicant unit to provide a secured connection to a first and a second access point" is unclear because a supplicant unit is not used to provide secure connections to access points. Claim 22 is rejected for similar reasons.

Claims 2-4, 6-10, 12-21, 23-27, and 29-31 are rejected as being dependent on a rejected independent claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 11-16, 19, 22-24, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Diepstraten et al. (cited 5,991,287).

For claim 1, Diepstraten et al. disclose a method comprising: roaming from a first access point to a second access point by presenting a power saving mode to the first

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access point while establishing a secured connection with the second access point; it is interpreted as roaming from a first access point to a second access point (see figure 4, block 407, wherein the AP is roaming for an AP with better quality) while providing a power saving mode to the first access point (see figure 4, block 403, wherein a power saving mode is provided) while establishing a secured connection with the second access point (see figure 4, block 408, wherein a handover is performed between the two AP's, which must be done in a secured connection). Claim 28 is rejected for similar reasons.

For claim 2, Diepstraten et al. disclose establishing the secure connection comprising: associating with the second access point; and authenticating by the second access point (see figure 4, block 408, wherein it is inherent in the handover process that an association and authentication of the second access point must occur). Claim 29 is rejected for similar reasons.

For claim 3, Diepstraten et al. disclose presenting a power saving mode to the second access point and exiting the power saving mode with the first access point (see figure 4, wherein after block 108, where a handover has taken place, the series of steps are repeated, including the power saving mode for the new AP); and receiving buffered data from the first access point (see col. 5, lines 28-33, wherein buffered messages are transmitted from the first access point to the mobile station 50). Claims 7, 13, 24, and 30 are rejected for similar reasons.

For claim 4, Diepstraten et al. disclose disassociating from the first access point and associating with the second access point (see figure 4, block 408, wherein it is inherent in the handover process that there is a disassociation from the first access point and an association with the second access point). Claim 31 is rejected for similar reasons.

For claim 5, Diepstraten et al. disclose an apparatus comprising: a supplicant unit to provide a secured connection to a first and a second access point and to present a power saving mode to the first access point while establishing the secured connection with the second access point; it is interpreted as a supplicant unit (see figure 1, box 50, wherein the mobile station 50 is the supplicant unit) which may be securely connected to a first and a second access point and the supplicant unit presents a power saving mode to the first access point while establishing the secured connection with the second access point (see figure 4, wherein the mobile station remains in a power save mode with the first AP from boxes 403-406, while establishing a connection with a second AP in boxes 407 and 408). Claims 11 and 22 are rejected for similar reasons.

For claim 6, Diepstraten et al. disclose the supplicant unit is able to associate with the second access point while presenting a power saving mode to the first access point and to establish an authenticated link with the second access point (see figure 4, block 408, wherein it is inherent in the handover process that an association and

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authentication of the second access point must occur). Claims 12 and 23 are rejected for similar reasons.

For claim 14, Diepstraten et al. disclose an authentication server to establish a secured link between the station (see col. 4, lines 14-16, wherein the server 20 is linked to the mobile stations) and the first and second access points according to an authentication protocol (see col. 3, lines 62-63, wherein the server 20 is linked to the access points).

For claim 15, Diepstraten et al. disclose the station comprises a supplicant unit to enable authentication (see figure 2, block 50, wherein it is inherent that the mobile station will have a supplicant unit to establish authentication).

For claim 16, Diepstraten et al. disclose the first and second access points comprises an authenticator unit to enable the station to a secured communication with at least one of the first and second access point (see figure 2, block 40, wherein it is inherent that the access point is an authenticator unit).

For claim 19, Diepstraten et al. disclose a wireless local area network (see col. 4, lines 13-14)

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10, 20, 21, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diepstraten et al. in view of Liu et al. (cited 7,177,637 B2).

For claim 8, Diepstraten et al. disclose all the subject matter of the claimed invention with the exception of first and second ports to provide a secured communication to first and second, respective, access points. Liu et al. from the same or similar fields of endeavor teaches first and second ports to provide a secured communication to first and second, respective, access points (see figure 5, block 502, wherein the access point has a port to connect to the mobile devices). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Liu et al. in the network of Diepstraten et al. The method taught by Liu et al. can be modified/implemented into the network of Diepstraten et al. by using ports in the access points. The motivation for first and second ports to provide a secured communication to first and second, respective, access points is to connect access points to mobile devices. Claim 25 is rejected for similar reasons.

For claim 9, Diepstraten et al. disclose all the subject matter of the claimed invention with the exception of the first port being authorized while performing a secured communication with the first access point and the second port being in an unauthorized mode. Liu et al. from the same or similar fields of endeavor teaches the first port being authorized while performing a secured communication with the first access point and

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the second port being in an unauthorized mode (see figure 3, wherein AP1 is in private mode, which only allows authorized devices and AP2 is in public mode which allows non-authorized devices). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Liu et al. in the network of Diepstraten et al. The method taught by Liu et al. can be modified/implemented into the network of Diepstraten et al. by having access points with different modes allowing authorized devices and not allowing unauthorized devices. The motivation for the first port being authorized while performing a secured communication with the first access point and the second port being in an unauthorized mode is to have authorized devices communicate with a specific access point. Claims 20 and 26 are rejected for similar reasons.

For claim 10, Diepstraten et al. disclose all the subject matter of the claimed invention with the exception of the second port being authorized while performing a secured communication with the second access point and the first port being in an unauthorized mode. Liu et al. from the same or similar fields of endeavor teaches the second port being authorized while performing a secured communication with the second access point and the first port being in an unauthorized mode (see figure 3, wherein AP1 is in private mode, which only allows authorized devices and AP2 is in public mode which allows non-authorized devices). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Liu et al. in the network of Diepstraten et al. The method

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taught by Liu et al. can be modified/implemented into the network of Diepstraten et al. by having access points with different modes allowing authorized devices and not allowing unauthorized devices. The motivation for the second port being authorized while performing a secured communication with the second access point and the first port being in an unauthorized mode is to have authorized devices communicate with a specific access point. Claims 21 and 27 are rejected for similar reasons.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diepstraten et al. in view of Luo (cited 2003/0169713 A1).

For claim 17, Diepstraten et al. disclose all the subject matter of the claimed invention with the exception of the authentication server is to be configured as a remote authentication dial-in user service (RADIUS) server. Luo from the same or similar fields of endeavor teaches the authentication server is to be configured as a remote authentication dial-in user service (RADIUS) server (see paragraph [0020], lines 1-2, wherein a RADIUS server is used in the WLAN network). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Luo in the network of Diepstraten et al. The method taught by Luo can be modified/implemented into the network of Diepstraten et al. by using a RADIUS server. The motivation for the authentication server is to be configured as a remote authentication dial-in user service (RADIUS) server is for authentication and authorization of access points.

For claim 18, Diepstraten et al. disclose all the subject matter of the claimed invention with the exception of the authentication protocol comprising an extensible authentication protocol. Luo from the same or similar fields of endeavor teaches the authentication protocol comprising an extensible authentication protocol (see paragraph [0020], lines 1-3, wherein a RADIUS server is used in the WLAN network that supports extensible authentication protocol). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Luo in the network of Diepstraten et al. The method taught by Luo can be modified/implemented into the network of Diepstraten et al. by using EAP. The motivation for the authentication protocol comprising an extensible authentication protocol is because EAP supports multiple authentication methods.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references include Beach (cited 2003/0086443 A1) and Ishii (cited 7,127,234 B2).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dargaye H. Churnet whose telephone number is 571-270-1417. The examiner can normally be reached on Monday-Friday from 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dargaye Churnet
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